

IN THE CLAIMS:

All pending claims and their present status are produced below.

11. (Currently amended) A method to analyze network performance, comprising generating a flows report to monitor a given flow, the given flow having one or more frames that are sent from a sending node to a receiving node, and the flows report ~~having one or more attributes including comprising:~~
~~an errors attribute depicting the number of errors belonging to the one or more~~
~~frames;~~
~~a sending node attribute indicating the sending node;~~
~~a receiving node attribute indicating the receiving node;~~
~~a data duration attribute indicating a time period from when the sending node sent a~~
~~first frame in the flow to the time that the receiving node received the last~~
~~frame having data in the flow;~~
~~an average data rate attribute indicating an average data rate for the flow;~~
~~a bytes attribute indicating a total number of bytes in the frames in the flow;~~
a data payload bytes attribute indicating a sum of the payload bytes for the frames in
the flow; and
a frames attribute indicating a number of frames in the flow;
a data frames attribute indicating a number of frames having data in the flow[[:]]
a first frame attribute indicating a sequence number of the first frame in the flow;
a last data frame attribute indicating a sequence number of the last frame having data
in the flow;

~~a last frame attribute indicating the sequence number of the last frame, having one of~~
~~data and acknowledgement;~~
~~a start time attribute indicating a time that the first frame having data was sent;~~
~~an end data time attribute indicating a time that the last frame having data was~~
~~received;~~
~~an end time attribute indicating a time that the last frame, having one of data and~~
~~acknowledgement, was received;~~
~~a data direction attribute indicating a direction in which the flow was traveling; and~~
~~a network busy time attribute indicating a total time that the one or more frames was~~
~~in transit during the flow.~~

12. (Currently amended) A method of analyzing network performance when executing a task, comprising displaying a chart, the chart further comprising:
a first and a second times during which one or more meaningful frames within the network are traveling in a first and a second directions, respectively, the first and second times each represented by a bar that shows at least one of:
an insertion time representing a cumulative time for one or more meaningful frames to be inserted into the network, and
a queuing, processing and propagation (QPP) time during which the one or more meaningful frames were within the network as a result of queuing, processing, and propagation; and
a time set representing one or more times during which each of one or more nodes in the network is respectively active during the task, whereby in each of the one or more nodes is represented by a bar that shows at least one of:

a total amount of time that the node was processing, and

a total amount of time that the node was sending but not processing.

13. (Previously presented) The method of claim 12, wherein the insertion time for each meaningful frame is computed as $\text{AdjustedBytes} * 8 / \text{Bandwidth}$, where AdjustedBytes represents a number of bytes that would have traversed a Wide Area Network (WAN) link in the network.
14. (Previously presented) The method of claim 12, further comprising the step of displaying the first and second times and the time set in a detailed report.
15. (Previously presented) The method of claim 14, wherein the detailed report further comprises one or more of:
 - an overall summary comprising a duration of the task;
 - a traffic section comprising byte and frame information;
 - a network busy time section comprising insertion time, QPP time and total time;
 - a network frame transit statistics section comprising transit times for the frames within the network during the task;
 - a node active time section comprising processing and sending times for each node in the network; and
 - a node processing statistics section comprising statistics on processing periods of the nodes in the network.
16. (Currently amended) A method of analyzing network performance when executing a task, comprising displaying within a detailed report, the detailed report comprising:

a first and a second times during which one or more meaningful frames within the network are traveling in a first and second directions, respectively;

a time set representing one or more times during which each of one or more nodes in the network is respectively active during the task;

an overall summary comprising a duration of the task;

a traffic section comprising byte and frame information;

a network busy time section comprising insertion time;

a network frame transit statistics section comprising transit times for each frame;

a node active time section comprising processing, sending and total active times for each node in the network; and

a node processing statistics section comprising statistics on node processing periods.

17. (Previously presented) The method of claim 16, wherein an insertion time for each meaningful frame is displayed, the insertion time computed as $\text{AdjustedBytes} * 8 / \text{Bandwidth}$, where AdjustedBytes represents the number of bytes that would have traversed a Wide Area Network (WAN) link in the network.
18. (Currently amended) A method of monitoring network performance when executing a task, the method comprising:

displaying a first processing time corresponding to a first node in the network, the processing time ~~having one or more~~ comprising attributes including having one of a node name and a node address, one of a start time and a start frame, one of an end time and an end frame and a duration, a number of errors associated with one of the start frame and the end frame, and a processing type, the processing type comprising one of:

a time period prior to a first data frame within a thread sent by a client[[:]],

a time period prior to a subsequent request within a thread is sent by the

client[[:]],

a time period from a last data frame to an end of the task[[:]],

a time period prior to a first data frame in a thread sent by a server[[:]],

a time period from a point that a last frame within a thread in a request is

received by the server to a time that a first response frame is returned

by the server[[:]],

a time period that a first server processes after receiving a request from a

lower tier until the first server begins sending a subsequent request to a

second server[[:]], and

a time period that the first server processes after receiving a reply from the

second server until the second server begins sending its reply to a third

server, the third server being a requesting node.

19. (Previously presented) The method of claim 18, further comprising displaying one or more additional processing times, each additional processing time corresponding to an additional node in the network.

20. (Currently amended) The method of claim 19, wherein each processing time additionally includes at least one of the following attributes:

~~a number of errors associated with one of a start frame and an end frame;~~

a duration of the processing time[[:]],

a time at which a node corresponding to the processing time began processing[[:]],

a time at which a node corresponding to the processing time stopped processing[[:]],

a start frame representing a frame number corresponding to commencement of the
processing time[[:]],
a description of the start frame[[:]],
an end frame representing a frame number corresponding to termination of the
processing time[[:]], and
a description of the end frame.

21. (Currently amended) A method of monitoring network performance when executing
a task, comprising:

displaying a first processing time corresponding to a first node in the network, the
first processing time having one or more attributes including a processing
type; and

displaying at least one additional processing time, each additional processing time
corresponding to at least one node in the network other than the first node[[:]];

wherein each processing time includes ~~at least one of~~ the following attributes:

a number of errors associated with one of a start frame and an end frame,
a duration of that processing time, and
one of a time at which a node corresponding to that processing time began

processing[[:]] and

a time at which the node corresponding to that processing time stopped
processing[[:]]

~~a start frame representing a frame number corresponding to commencement of~~
~~that processing time,~~
~~a description of the start frame,~~

~~an end frame representing a frame number corresponding to termination of
that processing time, and
a description of the end frame.~~

22. (New) The method of claim 11, wherein the flows report further comprises one or more additional attributes including:
- an errors attribute depicting the number of errors belonging to the one or more frames;
 - a sending node attribute indicating the sending node;
 - a receiving node attribute indicating the receiving node;
 - a data duration attribute indicating a time period from when the sending node sent a first frame in the flow to the time that the receiving node received the last frame having data in the flow;
 - an average data rate attribute indicating an average data rate for the flow;
 - a bytes attribute indicating a total number of bytes in the frames in the flow;
 - a frames attribute indicating a number of frames in the flow;
 - a first frame attribute indicating a sequence number of the first frame in the flow;
 - a last data frame attribute indicating a sequence number of the last frame having data in the flow;
 - a last frame attribute indicating the sequence number of the last frame, having one of data and acknowledgement;
 - a start time attribute indicating a time that the first frame having data was sent;
 - an end data time attribute indicating a time that the last frame having data was received;

an end time attribute indicating a time that the last frame, having one of data and acknowledgement, was received;

a data direction attribute indicating a direction in which the flow was traveling; and

a network busy time attribute indicating a total time that the one or more frames was in transit during the flow.

23. (New) The method of claim 21, wherein each processing time further includes at least one of the following attributes:

a start frame representing a frame number corresponding to commencement of that processing time,

a description of the start frame,

an end frame representing a frame number corresponding to termination of that processing time, and

a description of the end frame.